# **EXHIBIT 1**

# PLAINTIFFS' INTERROGATORIES PROPOUNDED IN JUNE AND JULY OF 2014, DEFENDANT'S ORIGINAL ANSWERS OF DATE AND DEFENDANT'S ANSWERS OF AUGUST 29, 2016.

The following interrogatory answers are part of the discovery that is the subject of Plaintiffs' October 5, 2016 30(b)(6) deposition.

#### WANDA OVALLES INTERROGATORIES

## **INTERROGATORY**

4. State the types of failsafe mechanisms built into the batter pack of the Sony Notebooks.

## **ANSWER**

4. SEL objects to this interrogatory because it is vague and ambiguous to the extent plaintiffs do not define what they mean by "failsafe mechanisms." SEL also objects to this interrogatory because it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence to the extent plaintiffs ask for information relating to any "failsafe mechanism" that cannot in any way relate to the incident described in plaintiffs' Complaint or the cause of that incident. Subject to and without waiving these objections, SEL states that it did not design or manufacture the battery pack supplied with the subject notebook computer. Nevertheless, and as SEL understands this interrogatory, SEL states that the subject battery pack and the cells used in the manufacture of that pack complied with requirements of the applicable standards promulgated by Underwriters Laboratories ("UL") – specifically, UL 2054 (2<sup>nd</sup> Edition) and UL 1642. SEL will produce copies of the UL Report and related material and Drawing No. SB-AA258 for the Model VGP-BPS22 battery pack which identify the "failsafe mechanisms," as SEL understands those terms, with which the Model VGP-BPS22 battery pack was equipped.

# 2<sup>ND</sup> ANSWER

4. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit. However, SEL is aware of actions taken during the design and manufacture of the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery pack and the 18650 G6G battery cell to reduce the possibility of battery cell failure and thermal runaway. Please refer to the UL Reports and related material for the notebook computer, the battery pack provided with the subject notebook computer and the 18650 G6G battery cell identified in Answer 5 to the Interrogatories of Wilson Ovalles. Please also refer to Drawing No. SB-AS258 for the Model VGP-BPS22, SEL 756-787, which identifies the protective circuits with which the notebook computer and battery pack were equipped.

The subject notebook computer was supplied with a VGP-BPS22 battery. This battery is composed of six Li-Ion cells model US18650G6G, a battery management unit (BMU), enclosure and connector. These components are designed and manufactured in a manner that ensure the safety of each and the final product. The BMU integrates circuits to prevent overcharging, abnormal discharge and increase in temperature. These circuits are monitored and controlled by a dedicated micro-processor. Further, it is assembled using components that have been evaluated for safety under the corresponding standard and have been designated as Recognized Components. In order to verify the effectiveness of all the design and manufacturing considerations, the entire battery is then evaluated in accordance to UL 2054.

For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEZL is aware, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, the Declaration of Robert McCaul and Answer 14 below.

SEL objects to this interrogatory because it is vague and ambiguous to the extent plaintiffs do not define what they mean by "failsafe mechanisms."

#### **INTERROGATORY**

6. Explain any additional protection mechanisms that were considered and rejected at the time of the design of the batter pack for the Sony Notebook. If additional protection was considered, but not used, set forth the reason it was not used.

#### **ANSWER**

6. SEL objects to this interrogatory because it is vague and ambiguous to the extent plaintiffs do not define what they mean by "protection mechanisms." SEL also objects to this interrogatory because it is overly broad and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SEL responds as following: As previously stated, SEL did not design or manufacture the battery pack. Further SEL does not have any information responsive to this request.

# 2<sup>ND</sup> ANSWER

6. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit and it doesn't know if any additional protection mechanisms were considered. However, SEL is aware of changes made during the design and manufacture of VAIO notebook computers, battery packs and 18650 lithium ion cylindrical cells. Please refer to the UL Reports and related material for the notebook computer, the battery provided with the subject notebook computer and the 1860 G6G better cell identified in Answer 5 to the Interrogatories of Wilson Ovalles. Please also see Drawing No. SB-AA258 for the Model VGP-BPS22 which identifies the protective circuits with which the notebook computer and battery pack were equipped. SEL 756-787. For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is aware,

please refer to SEI 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, the Declaration of Robert McCaul and Answer 4 above and 14 below.

## **INTERROGATORY**

14. State all protections built into the battery cells in the Sony Notebook.

## **ANSWER**

14. SEL objects to this interrogatory because it is vague and ambiguous as to the term "protections." Further, this request calls for speculation, as SEL did not design or assemble either the battery pack shipped with the notebook computer bearing part-serial number 27528430-3006567 nor did SEL design or manufacture the cells used to assemble that battery pack. Subject to and without waiving these objections, see the UL report for the Model G6G battery cell used in the assembly of the battery pack shipped with the notebook computer bearing part-serial number 27528430-3006567.

# 2<sup>ND</sup> ANSWER

- 14. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit. However, SEL is aware of actions taken during the design and manufacture of the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery pack and the 18650 G6G battery cell to reduce the possibility of battery cell failure and thermal runaway. Please refer to the UL Reports and related material for the notebook computer, the battery pack provided with the subject notebook computer and the 18650 G6G battery cell identified in Answer 5 to the Interrogatories of Wilson Ovalles. Please also refer to Drawing No. SB-AA258 8for the Model VGP-PBS22, SEL 756 787, which identifies the protective circuits with which the notebook computer and battery pack were equipped.
  - Center pin
  - Vent
  - Current Interrupt Device ("CID")
  - Positive Temperature Coefficient device ("PTC")
  - Separator
  - Insulation
  - Separator seal

The cells feature mechanisms designed to prevent explosion, such as center pin, CID and vent. In addition, cells contain an integrated PTC in order to prevent overheating due to external overload as well as insulation systems to prevent internal short circuits. The low melting point of the materials used in the separator act as a thermal fuse. Should the internal temperature increase, the separator will melt

thereby eliminating its porosity and the ability to allow the transfer of lithium ions. While the design and manufacturing techniques are unknown to SEL as they are unique to Sony Energy Devised Corporation ("SEND"), SEL knows their effectiveness as the cells have been tested and found in compliance with the relevant safety standards.

UL1642 is the Safety Standard for Li-Ion batteries. It includes requirements for construction and performance of Li-Ion battery cells. To evaluate compliance with the standard a number of tests are conducted. These tests include:

- Electrical Tests
- Mechanical Tests
- Environmental Tests
- Fire Exposure Test

In addition, the standard establishes marking requirements for the cells.

For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is aware, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, the Declaration of Robert McCaul and Answer 4 above.

#### WILSON OVALLES INTERROGATORIES

## **INTERROGATORY**

- 1. Have you or anyone acting on your behalf (e.g. designers or other engineers) conducted any tests, calculations, experiments, inspections or studies on Sony Notebook Model # VAIO Model VPC-EM32FM/WI (hereinafter Sony Notebook)? If so, identify with respect to each such test, calculation, experiment, inspection or study the following:
  - a. Its purpose;
  - b. The results;
  - c. The name, address and relationship to you of the person who performed it, if any; and
  - d. The name and address of the person who has present control of any document or other tangible thing relating to it.

## **ANSWER**

1. SEL objects to this interrogatory because it is generally vague and ambiguous. Subject to and without waiving these objections, SEL responds as follows: No one has conducted any such tests, calculations, experiments, inspections or studies on behalf of SEL. SEL did not design, manufacture, or assemble the Model VPC-EB32FM/WI notebook

computer. However, see UL Report and related material for the Model VPC-EB32FM/WI notebook computer produced by SEL.

# 2<sup>nd</sup> ANSWER

1. a-d SEL did not conduct any tests, calculations, experiments, inspections or studies on the Model VPC-EB32FM/WI notebook computer. However, SEL is aware of testing conducted by Underwriters Laboratories ("UL") and refers the plaintiffs to SEL 478 – 735.

SEL objects to identifying tests or experiments conducted by its consulting experts in support of its defense of this case on the grounds that such information is protected from disclosure by Fed. R. Civ. P. 26(b)(3) and (4).

## INTERROGATORY

- 5. In establishing the design criteria of the Sony Notebook, were any tests conducted? If so, state the following:
  - a. The types of tests conducted;
  - b. What the design objectives were;
  - c. The name, address and position with the defendant(s) of the person who established or defined the design objectives; and
  - d. All industry standards, governmental regulations, specifications, internal corporate standards or regulations used by the person or persons who established or defined the design objectives.

## **ANSWER**

5. SEL objects to this interrogatory because it is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SEL responds as follows: SEL did not establish the design criteria of the Model VPC-EB32FM/WI notebook computer. However, SEL understands that this model notebook computer and the battery provided with the unit were designed by comply with and met or exceeded the requirements of applicable standards promulgated by Underwriters Laboratories ("UL") – specially, UL 60950-1 [2<sup>nd</sup> Edition], UL 204 [2<sup>nd</sup> Edition]. And UL 1642. SEL will produce copies of the UL Report and related material for the Model VPC-EB32FM/WI notebook computer and the Model VGP-BPS22 battery.

# 2<sup>ND</sup> ANSWER

5. a-d. SEL did not establish the design criteria of the Model VPC-EB32FM/WI notebook computer. However, SEL understands that this model notebook computer and the battery pack and cells provided with the unit were designed to comply with and met or exceeded the requirements of applicable standards promulgated by Underwriters Laboratories ("UL") – specifically, UL 60950-1 [2<sup>nd</sup> Edition], UL 2054 [2<sup>nd</sup> Edition], and UL 1642. SEL has produced copies of the

UL Reports and related material for the Model VPC-EB32FM/WI notebook computer, Model VGP-BPS22 battery pack and the 18650 G6G battery cell. Please refer to SEL 478-735, 736-755 and 1269-1438 and 3813.

# **INTERROGATORY**

6. Please describe all alternative approaches to the design and manufacture of the Sony Notebook in question which were or are known to the defendant(s) (e.g. design, material used, components, manufacturing process, quality control procedures, protective devices, warnings) and which of these alternatives were considered by the defendant(s) and which were not.

# **ANSWER**

6. SEL objects to this interrogatory because it is compound and calls for speculation, and is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SEL responds as follows: SEL did not design or manufacture the Model VPC-EB32FM/WI notebook computer and does not have any information responsive to this interrogatory. However, see the UL Report and related material for the Model VPC-EB32FM/WI notebook computer produced by SEL.

# 2<sup>ND</sup> ANSWER

6. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the united. However, SEL is aware of actions taken during the design and manufacture of the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery pack and the 18650 G6G battery cell to reduce the possibility of battery cell failure and thermal runaway. Please refer to the UL Reports and related material for the notebook computer, the battery provided with the subject notebook computer and the 18650 G6G battery cell identified in Answer 5 Please also refer to Drawing No. SB-AA258 for the Model VGP-BPS22, SEL 756 – 787, which identifies the protective circuits with which the notebook computer and battery pack were equipped. For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is away, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, the Declaration of Robert McCaul, Answer 9 below and SEL's Answers to Wanda Ovalles's Interrogatories 4 and 14.

# **INTERROGATORY**

9. Please describe in detail how this defendant designed and manufactured the Sony Notebook computer to prevent batter cells from experiencing thermal runaway.

# **ANSWER**

9. SEL objects to this interrogatory as vague and ambiguous because plaintiff does not define what he means by "thermal runaway." Subject to and without waiving this

objection, SEL responds as follows: As previously stated, SEL did not design or manufacture the subject notebook computer or the battery provided with the unit. However, see the UL Reports and related material for the Model VPC-EB32FM/WI notebook computer and the Model VGP-BPS22 battery provided with the subject notebook computer and Drawing No. SB-AA258 for the Model VPG-BPS22 battery pack which identify the protective circuits with which the notebook computer and battery pack were equipped.

# 2<sup>ND</sup> ANSWER

9. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit. However, SEL is aware of actions taken during the design and manufacture of the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery pack and the 18650 G6G battery cell to reduce the possibility of battery cell failure and thermal runaway. Please refer to the UL Reports and related material for the notebook computer, the battery provided with the subject notebook computer and the 18650 G6G battery cell identified in Answer 5. Please also refer to Drawing No. SB-AA258 for the Model VGP-BPS22, SEL 756 – 787, which identifies the protective circuits with which the notebook computer and battery pack were equipped.

The Sony notebook computer Model VPC-EB32 is powered by two different means, an AC adapter which plugs into the mains and a rechargeable Li-Ion battery. It accepts an input voltage from 100VAC to 240VAC and provides 19.5 VDC limited to 3.3 Amps. The AC adapter also serves to charge the battery. Internal circuits in the notebook computer monitor and regulate the voltage and current supplied to the battery during charging mode. Additional circuits limit the current drawn by the notebook while operated by the battery. These circuits are designed to maintain the cells at its optimum operating region as it relates to voltage, current and temperature. This prevents overcharging and abnormal discharging of the battery should a malfunction occur in the AC adapter and/or notebook computer. In addition to all the active circuits, one time fuses protect all circuits for over current. The opening current of these fuses is selected to ensure that there is no risk of ignition of the materials composing the notebook.

For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway which SEL is aware, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, the Declaration of Robert McCaul and SEL's Answers to Wanda Ovalles's Interrogatories 4 and 14.

# **INTERROGATORY**

11. Please describe in detail all analysis and/or testing that you or anyone on your behalf undertook when selecting the battery protection circuit used in the Sony Notebook or similar computers and detail all problems that were reported to you regarding the battery.

# <u>ANSWER</u>

11. SEL objects to inter interrogatory to the extent it is vague and ambiguous because plaintiff does not identify what he means by "battery protection circuit." Subject to and without waiving these objections and as SEL understand this interrogatory, it did not conduct any such analysis or testing because it did not design or manufacture the subject notebook computer or the battery provided with the unit. However, SEL can state that the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery provided with the unit and the Model G6G cells used to assemble the battery pack were designed to comply with the requirements of applicable UL standards (specifically, UL 60950-1 [2<sup>nd</sup> Edition], UL 2054 [2<sup>nd</sup> Edition], and UL 1642). See UL reports and related materials for the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery and the Model G6G cell produced by SEL.

# 2<sup>ND</sup> ANSWER

11. SEL did not conduct such analysis or testing of the battery protection circuit because it did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit. However, SEL is aware that the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery pack provided with the unit and the Model G6G cells used to assemble the batter pack were designed to comply with the requirements of applicable UL standards (specifically, UL 60950-1 [2nd Edition], UL 2054 [2nd Edition], and UL 1642). Please refer to the UL reports and related test data and material for the Model VPC-EB32FM/WI notebook computer, the Model VGP-BPS22 battery and the Model G6G cell produced by SEL and identified in Answer 5. SEL is not aware of any reported problems with the battery protection circuit, battery pack or cells resulting from those tests.

## **INTERROGATORY**

- 16. Please identify each and every audit conducted by this defendant, its agents, servants or employees from 2000 to the present on the following Sony Notebook components:
  - a. Audit of the Sony line;
  - b. Audit of the battery pack manufacturer; and
  - c. Audit of the battery cell manufacturer.

# **ANSWER**

16. SEL objects to this interrogatory because it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. SEL also objects to this interrogatory to the extent it is vague and ambiguous because plaintiff does not identify what he means by "the Sony line." Subject to and without waiving these objections, SEL responds as follows: As previously stated, SEL did not manufacture or assemble the subject notebook computer. Further, SEL does not have any information responsive to this interrogatory.

## 2<sup>ND</sup> ANSWER

16. a-c. SEL objects to this interrogatory on the grounds that the use of the term "audit" is vague and ambiguous. Notwithstanding the foregoing objection, SEL states that it is not aware of any such "audits" as it understands that term.

# **INTERROGATORY**

18. Please state with specificity any and all change control processes for all of Sony's vendors and/or partners in the manufacturing and design of Sony laptops and/or its components.

# **ANSEWR**

18. SEL objects to this interrogatory because it is vague and ambiguous to the extend plaintiff does not define what he means by "change control processes." Subject to and without waiving these objections and as SEL understands this interrogatory, it states that it does not have any information responsive to this interrogatory.

# 2<sup>ND</sup> ANSWER

18. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit and it's not aware of all changes to the VAIO notebook computers during the period of time they were manufactured and sold. However, SEL is aware of changes made during the design and manufacture of VAIO notebook computers, battery packs and 18650 lithium ion cylindrical cells. Please refer to the UL Reports and related material for the notebook computer, the battery provided with the subject notebook computer and the 18650 G6G batter cell identified in Answer 5. Please also see Drawing No. SB-AA258 for the Model VGP-BPS22 which identifies the protective circuits with which the notebook computer and battery pack were equipped. SEL 756 – 787. For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is aware, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, 3813, the Declaration of Robert McCaul, Answers 5 and 9 above and SEL's Answers to Wanda Ovalles's Interrogatories 4 and 14.

# **INTERROGATORY**

22. Please describe any and all changes made by this defendant, its agents, servants, employees and/or vendors to the battery or related protection circuits in the Sony Notebook computer from 2000 to the present, including in your answer all revision numbers for changes and a revision history.

#### **ANSWER**

22. SEL objects to this interrogatory because it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SEL responds as follows: SEL has no information responsive to this request other than as disclosed by the UL Reports and related material for the Model VPC-EB32FM/WI notebook computer and the Model VGP-BPS22 battery, the Service Manual for the Model VPC-EB32FM/WI notebook computer, and Drawing No. SB-AA258 for the Model VGP-BPS22 battery pack produced by SEL.

# 2<sup>ND</sup> ANSWER

22. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit including the battery protection circuit and it is not aware of all changes to the VAIO notebook computers during the period of time they were manufactured and sold. However, SEL is aware of changes made during the design and manufacture of VAIO notebook computers, battery packs and 18650 lithium ion cylindrical cells. Please refer to the UL Reports and related material for the notebook computer, the battery pack provided with the subject notebook computer and the 18650 G6G batter cell identified in Answer 5. Please also see Drawing No. SB-AA258 for the Model VGP-BPS22 which identifies the protective circuits with which the notebook computer and battery pack were equipped. SEL 756 - 787. For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is aware, please refer to SEL 1439 - 1882, 1952 - 2000, 3734 - 3756, 3770 - 3776, 3813, the Declaration of Robert McCaul, Answers 5 and 9 above and SEL's Answers to Wanda Ovalles's Interrogatories 4 and 14.

## **INTERROGATORY**

- 23. Please provide a list of any and all requested changes to the Sony Notebook, including in your answer the following:
  - a. The date each change was requested;
  - b. Whether or not the change was approved by Sony and why or why not;
  - c. Whether or not testing was done prior to approval of the change by Sony; and
  - d. What was the change requested and approved and why it was approved?

## **ANSWER**

23. SEL objects to this interrogatory because it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving these objections, SEL responds as follows: SEL has no information responsive to this request other than as disclosed by the UL Reports and related material for the Model VPC-EB32FM/WI notebook computer and the Model VGP-BPS22 battery, the Service Manual for the Model VPC-EB32FM/WI notebook computer, and Drawing No. SB-AA258 for the Model VGP-BPS22 battery pack produced by SEL.

#### 2<sup>ND</sup> ANSWER

23. a-d. SEL did not design or manufacture the subject notebook computer or the battery pack and cells provided with the unit including the battery protection circuit and it is not aware of all changes to the VAIO notebook computers during the period of time they were manufactured and sold. However, SEL is aware of changes made during the design and manufacture of VAIO notebook computers, battery packs and 18650 lithium ion cylindrical cells. Please refer to the UL Reports and related material for the notebook computer, the battery pack provided with the subject notebook computer and the 18650 G6G batter cell identified in Answer 5. Please also see Drawing No. SB-AA258 for the Model VGP-BPS22 which identifies the protective circuits with which the notebook computer and battery pack were equipped. SEL 756 – 787. For additional information about actions taken to reduce the possibility of battery cell failure and thermal runaway about which SEL is aware, please refer to SEL 1439 – 1882, 1952 – 2000, 3734 – 3756, 3770 – 3776, 3813, the Declaration of Robert McCaul, Answers 5 and 9 above and SEL's Answers to Wanda Ovalles's Interrogatories 4 and 14.